DETAILED ACTION

1.   This action is responsive to communications: amendment filed on 12/14/09 to

application filed on 08/05/04.

2.   Claims 16-17, 19-26, 31-38 are pending claims in this case. Claims 16 and 31 are

dependent claims.

3.   All rejections in the previous office action not set forth below have been

withdrawn as necessitated by the amendment.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

5.   Claims 16-17, 19-26 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

Regarding independent claim 16, this claim recites the limitation "the original XML

document". There is insufficient antecedent basis for this limitation in the claim.

Dependent claims 17, 19-26 are rejected for fully incorporating the dependencies of

its base claim.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   **Claims 16, 20-21, 23-25, 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Cseri</u> et al., US 2003/0046317 A1, filed 04/19/01, in view of <u>Eller,</u> US 2005/0278616, filed 06/09/2004, <u>Petersen</u> et al., US 2005/0144556 A1, filed 12/31/2003, and <u>Debettencourt</u> et al., US 20050060372, filed 8/27/2003.**

Regarding independent claim 16, Cseri teaches a network device comprises:

-       at least one processor (Cseri, fig.1; [0020]; personal and server computers);

-       a network interface configured to communicate with the at least one processor and a network (Cseri, fig.1, [0020]; connecting to the Internet network);

-       an XML document processing module, including a compression module configured to compress an XML document into a compressed binary stream to convert the compressed binary stream into compressed text encoded from the compressed binary stream, and to format the compressed text and format the text so as to provide back the XML document, wherein compressing an XML document into a binary stream includes compressing redundant text stream in the XML document (Cseri, [0014], [0020], [0063], [0092]; compressing XML document by tokenizing the XML document to produce XML binary formatted document and converting the XML binary formatted document to parsed XML and convert back to the XML document for displaying to a user computer, wherein the tokenizing includes tokenizing redundant XML tags, such as <a> or).

However, Cseri does not explicitly disclose the binary stream into compressed ASCII text encoded and formatting the compressed ASCII text so as to form a compressed valid XML documents including replacing any invalid XML character with standard XML replacement text.

Eller teaches converting binary stream into ASCII text encoded and versa; and formatting the ASCII text to form a valid XML document (Eller, fig.2, [0018]-[0019], [0044]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Eller's teaching and Cseri's teaching to convert the compressed binary into ASCII text encoded and formatting the ASCII text to form a valid XML document, since the conversion would have converted different binary encoded and provided XML document in valid form.

Petersen teaches XML documents are compressed valid XML documents with elements and attributes in shot tokens (Petersen, [0083]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Petersen's teaching and Cseri's teaching to convert the compressed binary into compressed valid XML, since the conversion would have provided advantage of storing and sending over the network the compressed valid XML documents which are in reduced size.

Debettencourt teaches replacing invalid XML characters with standard XML text (Debettencourt, [0233]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Petersen's teaching and Cseri's teaching to replace

invalid XML character with standard XML text, since the replacement would have

provided an XML document in a valid format.

Regarding claim 20, which is dependent on claim 16, Cseri does not teaches

XML document processing module includes a decompression module to decompress

compressed valid XML document.

Sullivan teaches the XML document processing module includes a decompression

module to decompress compressed valid XML document (Sullivan, fig.4; col.4, lines 64-

66; decompressing a token XML document to XML document).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to have combined Sullivan's teaching and Cseri's teaching to include

a decompressing module, since the combination would have recreated the XML from the

token XML document.

Regarding claim 21, which is dependent on claim 16, Cseri teaches the network

device is an embedded device server operable to manage a remote device using XML

documents (Cseri, [0020]; server and client).

Regarding claim 23, which is dependent on claim 16, Cseri teaches the network

interface includes a web interface (Cseri, [0020]-[0021]; in order to transmit, access

XML web document in the Internet, the network interface must includes a web interface).

Regarding claim 24, which is dependent on claim 16, Cseri teaches the network interface is a wireless network (Cseri, [0021]).

Regarding claim 25, which is dependent on claim 24, Cseri teaches the network device is included in a cell phone (Cseri, [0020], [0115], hand-held devices, mobile phones).

Regarding independent claim 31, Cseri teaches the steps of:

- a communication network (Cseri, [0020], [0021]; communication network for connecting systems to the Internet network);

- at least first and second network devices to communicate over the network (Cseri, [0020], [0021]; the network device comprises personal computer, hand-held devices, server computers, main frames, etc., wherein each network device includes:

    o at least one processor (Cseri, [0020]);

    o a network interface to communicate with the at least one processor (Cseri, figure 1, [0020], [0021]).

    o an XML document processing module, wherein the XML document processing module includes:

        ▪ a compressing module configured to compress an XML document and to convert compressed an XML document into a compressed binary stream and to convert the binary stream into text and format the text so as to provide back the XML

document (Cseri, [0014], [0020], [0063]; compressing XML

document by tokenizing the XML document to produce XML

binary formatted document and converting the XML binary

formatted document to XML document for displaying to a user

computer).

However, Cseri does not explicitly disclose the binary stream into compressed

ASCII text encoded and formatting the compressed ASCII text so as to form a

compressed valid XML documents for transfer over the network.

Eller teaches converting binary stream into ASCII text encoded and versa; and

formatting the ASCII text to form a valid XML document (Eller, fig.2, [0018]-[0019],

[0044]).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to have combined Eller's teaching and Cseri's teaching to convert

the compressed binary into ASCII text encoded and formatting the ASCII text to form a

valid XML document, since the conversion would have converted different binary

encoded and provided XML document in valid form.

Petersen teaches XML documents are compressed valid XML documents with

elements and attributes in shot tokens for transfer over the network (Petersen, [0083],

[0087]) and the compressed valid XML documents can be reconstructed to original XML

document to display to user (Petersen, [0090]).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to have combined Petersen's teaching and Cseri's teaching to

convert the compressed binary into compressed valid XML, since the conversion would

have provided advantage of storing and sending over the network the compressed valid

XML documents which are in reduced size.

Regarding claim 32, which is dependent on claim 31, referring to rationale relied

to reject claim 31, the limitation "the first network device is an embedded device server,

the first network device operable to receive a device configuration file as a compressed

valid XML document and decompress the document" is included. The rationale is

incorporated herein.

Regarding claim 33, which is dependent on claim 31, Cseri teaches the first

network device is operable to transfer to a status message as a compressed valid XML

document to the second network device (Cseri, fig.3B, [0063]; a system sends the

compressed XML document).

Regarding claim 35, which is dependent on claim 31, Cseri teaches the network

is a wireless communication network (Cseri, [0021]).

8.   **Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

Cseri, Eller, Petersen and Debettencourt as applied to claim 16 above, and further

in view of Krasinski et al., US 6850948 A1, filed 10/30/2000.

Regarding claims 36-37, which are dependent on claims 16 and 31 respectively,

Cseri teaches compress a first XML document into a binary stream; convert the binary

stream into a compressed valid XML document as explained in claim 1. However, Cseri

does not teach associate at least on XML tag with the compressed valid XML document, wherein the XML tag identifies the document as a compressed XML document.

Krasinski teaches associating at least on XML tag with the compressed valid XML document, wherein the XML tag identifies the document as a compressed XML document (Krasinski, fig.2, claim 3).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Krasinski's teaching and Cseri's teaching to insert XML tag with compressed valid the XML document, since the combination would have identified the document as a compressed document as Krasinski disclosed.

Regarding claim 38, which is dependent on claim 37, refer to claim 1, Cseri teaches receive the compressed valid XML document containing compressed text; reconvert the compressed text into a compressed binary stream and decompress the binary stream to obtain the first XML document (Cseri, [0014], [0020], [0063], [0092]; and fig.3B).

9.   Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Cseri, Eller, Petersen and Debettencourt</u> as applied to claim 16 above, and further in view of <u>Girardot</u> et al., US 2003/0023628 A1, filed 04/09/01.

Regarding claim 17, which is dependent on claim 16, Cseri does not explicitly disclose the XML document processing module is configured to compress the XML document into the compressed binary stream using a deflate compression algorithm.

Girardot teaches deflate compression is popular used to compress a document

(Girardot, [0009]).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to have combined Girardot's teaching and Cseri's teaching to

compress the XML document using deflate compression algorithm, since the deflate

compression is popular one.

10.   **Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over**

Cseri, Eller, Petersen and Debettencourt as applied to claim 16 above, and further

in view of Tycksen, Jr. et al., US 6,189,097 B1, filed 03/24/97.

Regarding claim 19, which is dependent on claim 18, Sceri does not teaches the

binary to ASCII text encoding algorithm includes using base-64 encoding algorithm.

Tycksen teaches the binary to ASCII text encoding algorithm includes using base-

64 encoding algorithm (Tycksen, col.9, lines 7-15).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to have combined Tycksen's teaching into Eller and Cseri's teaching

to include a base-64 encoding algorithm, since the combination allowed converted the

XML binary data in different encoded formats.

11.   **Claims 22, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

Sceri, Eller, Petersen and Debettencourt as applied to claims 16 above, and further

in view of Ma et al., US 2005/0063575 A1, filed 09/22/03.

Regarding claim 22, which is dependent on claim 16, Sceri does not explicitly disclose the network interface includes a serial port.

Ma teaches network interface includes a serial port (Ma, [0074]; a serial communication network).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Ma's teaching and Sceri's teaching to include a serial port, since the combination would have connected systems using many types of communication network.

Regarding claim 34, which is dependent on claim 31, Sceri teaches the network is wired or wireless satellite network (Sceri, [0019], [0020]). However, Sceri teaches does not explicitly disclose the network is a serial communication network.

Ma teaches network is a serial communication network (Ma, [0074]; serial wireless network).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined Ma's teaching and Sceri's teaching to include a serial wireless network, since the combination would have connect system using many type of communication network.

12.   **Claim 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sceri, Eller, Petersen and Debettencourt as applied to claim 16 above, and further in view of Hsu et al., US 2004/0205158, filed 02/24/03.**

Regarding claim 26, which is dependent on claim 16, Sceri teaches the network

is a wireless local area network (WLAN) (Sceri, [0019], [0020], network LAN and is

wired or wireless). However, Sceri does not explicitly disclose the network device is

included in a WLAN computer card.

Hsu teaches network device is included in a WLAN computer card (Hsu, [0093],

laptop includes WLAN card).

It would h have been obvious to a person of ordinary skill in the art at the time the

invention was made to have combined Hsu's teaching into Sceri's teaching to include

WLAN computer card, since the combination would have connected systems using many

type of communication network.

Response to Arguments

13.   Applicant's arguments with respect to claims 16-17, 19-26, 31-38 have been

considered but are moot in view of the new ground(s) of rejection.

Conclusion

14.   The prior art made of record, listed on PTO 892 provided to Applicant is

considered to have relevancy to the claimed invention.

Applicant should review each identified reference carefully before responding to

this office action to properly advance the case in light of the prior art.

15.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thu V. Huynh whose telephone number is (571) 272-

4126. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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/Thu Huynh/
Primary Examiner, Art Unit 2178
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